YouTube Ideas
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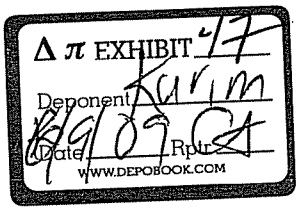

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Copyrighted content

Although the new 10-minute length restriction serves well to reinforce the official line that YouTube is not in the business of hosting full-length television shows, it probably won't cut down the actual amount of illegal content uploaded since standard 22-minute episodes can still easily be uploaded in parts, and users will continue to upload the "juiciest" bits of television shows. Not all copyrighted content on YouTube should be treated the same:

- As of today episodes and clips of the following well-known shows can still be found: Family Guy, South Park, MTV Cribs, Daily Show, Reno 911, Dave Chapelle. This content is an easy target for critics who claim that copyrighted content is entirely responsible for YouTube's popularity. Although YouTube is not legally required to monitor content (as we have explained in the press) and complies with DMCA takedown requests, we would benefit from *preemptively* removing content that is blatantly illegal and likely to attract criticism. This will help to dispel YouTube's association with Napster (Newsweek: "Is YouTube the Napster of Video?", "Showbiz unsure if YouTube a friend or foe"). Although a more thorough analysis is required, much of this content does not even seem to attract many views.

- Obscure/international copyrighted content (Korean soaps, Anime, ...): Since this "subculture" material is only popular among a small but dedicated group of viewers, it is less likely to result in legal problems in the short run, and keeping it will continue to attract people and demonstrates that YouTube is the best place online to find rare ("long tail") content. Therefore it's best to remove this material following DMCA notices, but not preemptively.

- Copyrighted content that goes viral and obtains far more views on YouTube than it possibly could have at the original source. Examples: Lazy Sunday, Natalie Portman rapping, Autistic basketball player, Tom Cruise on Oprah. Despite the higher legal risk it may be best to let these clips run their course on YouTube until the DMCA notice arrives, because their forced removals have been highly publicized in the media. For many people these events call into question whether the traditional media really "gets it" and this may ignite discussions that could eventually convince traditional media to see YouTube as a distribution partner and not as an enemy.

3-strikes policy

Although users are told in two emails that their accounts will be closed after the third violation, the policy appears to have caught some valuable users (users who attract many other users) by surprise and may have alienated them against YouTube. Some have launched campaigns against YouTube. I think the 3-strikes policy should remain, but we should make it more clear by displaying large warnings on the *website* to the users in question upon login. They don't seem to pay much attention to warnings in emails.

Bringing back tags

Form's usability study found that search is the predominant way users find videos on YouTube. It's fair to assume that users would also use tags (which are very similar to search) if they were more prominently featured and if they were more accurate. From a UI-perspective, tags have remained in the background since our launch. Another problem is that many users enter useless tags during video upload.

The accuracy of the Related Videos window drives the number of videos viewed on the site. Because the Related Videos results depend entirely on the tags that the (often clueless) video uploader entered, we should A) make video owners aware of the relationship between their tags and Related Videos and B) offer them tools to pick better tags.

Two features that can help users tweak the Related Videos window that is displayed on their own videos:

- Display an initially empty Related Videos window on the video upload page (my_videos_upload) and on the video edit page (my_videos_edit). As the user types tags into the "Tags:" HTML form, the Related Videos page is automatically updated in real-time and filled with the related videos that would be displayed for the tags that the user has entered so far. This is similar to Google Suggest ("As you type, Google will offer suggestions."). See http://www.google.com/webhp?complete=1

- Sometimes videos only make sense in the context in which they relate to a previous video. Examples: commentary or follow-up videos about another video,

or spoofs/parodies of an original video. In those cases the original video should definitely appear in the Related Videos window, or otherwise the video being viewed does not make sense. However, due to poorly chosen tags the original video often does not appear there. The video author should be able to pick another specific video on YouTube that will then be "forced" to appear as the first video in the Related Videos window. (This could be hacked on top of current functionality with a hidden randomly generated unique tag.)

The "Recent Tags:" field (which has existed since launch) may not be an optimal use of front-page real estate. It would be more relevant and interesting to have a "Top Tags" field instead that only shows the tags of the most popular videos from the previous 24 hours.

We could also store searches entered by users and feature the most popular recent searches, after filtering out the dirty ones.

Historical Most Viewed

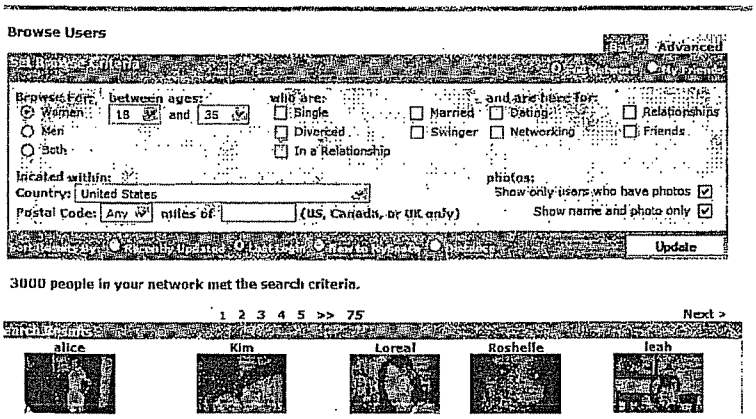
Many users use the Most Viewed (Today) page to quickly find the newest most entertaining clips. The page only shows videos uploaded in the last two days to keep the content fresh.

The most popular videos of all time can always be found on the Most Viewed (All Time) page, but the videos that were only popular for a few days are lost in a sea of millions of videos once they drop off the Today list. Examples: Scary Maze, Four-legged robotic mule, Breakup.

User activity is the best metric for finding good content. The "best" videos are those with the most views/comments. One way to increase views is to help users find the best videos. Users should be able to browse the "Most Viewed (Today)" page as it appeared on any previous day in the past. (The same applies to "This Week" for any previous week, etc). Note that these pages are static: Once a page is generated for a given time period it will never have to be re-generated, so this feature does not put additional strain on the database.

Connecting local users

Like MySpace and other social networking sites have done, YouTube should let people find other local users to strengthen the sense of community. Since we now collect location information during signup, we can add user search functionality:



MySpace's user search

Also interesting:

- Search for videos recorded within X miles of a location. ("Show me all videos recorded in Palo Alto")
- See most popular videos by location. ("Show me videos that are popular among users in Los Angeles")

Personal video portal

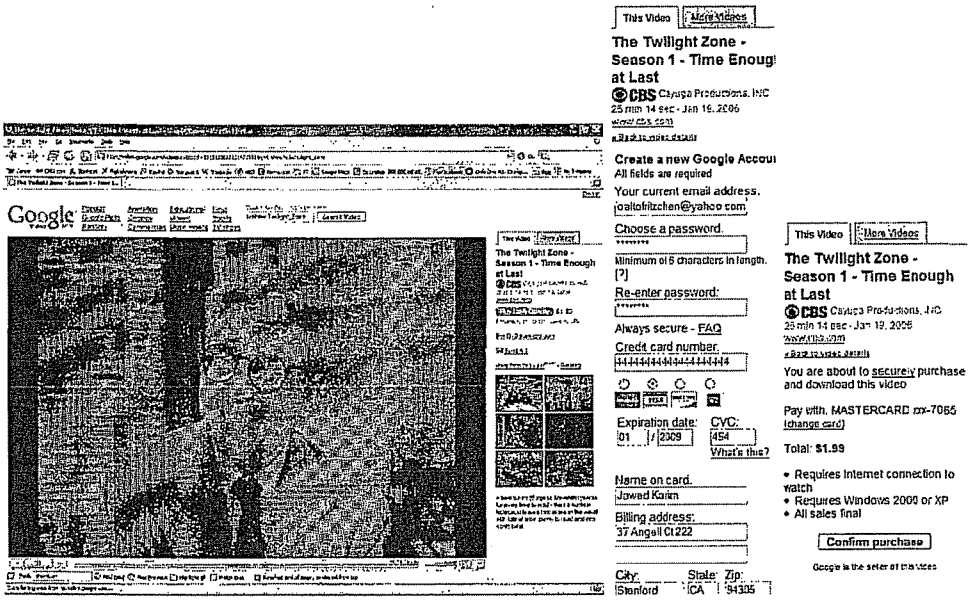
Much of MySpace's success is due to its members' ability to customize profiles. Although YouTube Profiles are now somewhat customizable, this ability is missing from the user's Video page (profile_videos). Video owners should have more control over this page, so that they can create a "personal video portal". This includes the ability to:

- Change the order of videos shown
- Change layout and color scheme
- Directly embed some videos into the page (using embeddable player)
- Organize videos into albums (may be able to use Playlists)

In the future YouTube could provide video owners with detailed viewing statistics about each video, such as breakdown of viewers by country, gender, and age. These metrics would be especially interesting and valuable to paying commercial content providers who use YouTube as a distribution platform.

Google Video

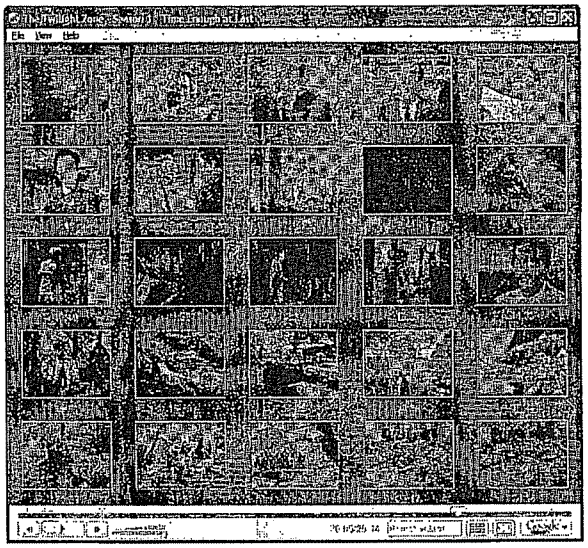
Google's sparse interface lacks community features and is optimized for purchasing music videos, TV shows, and full-length movies. The checkout process is fairly smooth, going from a 30-second preview to payment and download:



Google Video Player notable features

The Google Video Player can be used to watch any video on Google Video, and must be used to watch paid content. Every video watched is automatically downloaded and saved for future access to `My Documents\My Videos\Google Videos`.

- Resizable video, can watch at any size including full screen mode
- Paid video content encoding: 480x360, 800 kbps video, 128 kbps audio
- Quick navigation through scene selection thumbnails:



Google Results Page notable features

- Can play all search result videos back-to-back with one click
- Can play search result videos within thumbnail view (each thumbnail is actually a small embedded player)

Search result sort/display methods

- Sort by Price: For Sale / Free
- Sort by Length: Long / Medium / Short
- Display mode: Matrix / Detailed list

Google Watch Page notable features

Flash player

- Google Flash stream: 320x240, 430 kbps video, 64 kbps audio (YouTube Flash stream: 320x240, 300 kbps video, 64 kbps audio)
- User can skip video beyond what is buffered
- User can switch from windowed to full screen mode and back while playing without interrupting video position

Most videos are downloadable in formats:

- MPEG-4
- Google Video Player (.gpv) This is a pointer file that simply contains the full video content's URL. Upon opening this file in Google Video Player, the corresponding .gpi file (the video data) is shown while being downloaded and saved in the background.

Google Video upload process

The upload process is cumbersome at best and is optimized for very large uploads, not casual user-generated content. After uploading, it can take several days for the content to be reviewed, before it appears on the site.

Uploading videos requires using the Google Video Uploader application. Possible advantages of using an application instead of a web interface are:

- There is no maximum upload file size. HTTP uploads are limited by the maximum POST content-length specified in the web server.
- Uploads of large files can be resumed if interrupted in the middle.
- User sees reliable feedback of upload progress.

YouTube 1-click video uploading application

Most of the above advantages of using the Google Video Uploader currently do not apply to YouTube. However, I have noticed that more people are using YouTube videos as a messaging medium. That is, the purpose of their videos is to talk to other YouTube members. For such videos the current upload process is cumbersome and has a high overhead because it requires many steps. Especially for non-tech-savvy members there would be advantages to having an application that integrates video capture and uploading all into a one-click process. Since building such a product internally is a development headache it would be worthwhile to investigate whether we could contract out the development of such an application if it is deemed useful.

Apple Movie Trailers

Apple Movie Trailers is pushing the envelope for freely available online video clips. They are encoded at 1920x1080, H.264 10 mbps, and the average 2 min trailer is 150 MB. This is too large to stream in real-time on most broadband connections, but it will be possible soon, with Comcast already offering 6 mbps connections.